UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,092	07/12/2001	Liang Hua Hsu	2000P09094US01	1886

7590 07/16/2004

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EXAMINER
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ART UNIT	PAPER NUMBER
2179	

DATE MAILED: 07/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/904,092	HSU ET AL.
	Examiner	Art Unit
	Doug Hutton	2179

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 April 2002</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-19</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-19</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>12 July 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>04292002</u>.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Specification

The abstract of the disclosure is objected to because it exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).

Drawings

Figures 1 and 2 should be designated by a legend such as – PRIOR ART – because only that which is old is illustrated. See MPEP § 608.02(g).

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-19 are rejected under 35 U.S.C. 102(b) as being anticipated by DeRose et al., U.S. Patent No. 5,983,248.

Claim 1:

DeRose discloses a system for processing a plurality of related sub-documents to produce information associated with an encompassing document structure (see Figures 1-21; see Column 1, Line 1 through Column 30, Line 4; specifically, see Column 11, Lines 27-37), comprising:

- a source of control information for determining content structure of an encompassing document (see Figures 4 and 5; see Column 8, Line 47 through Column 9, Line 39 – the electronic publishing system discloses a "source of control information for determining content structure of an encompassing document" in that it includes an SGML document that defines the structure of the "encompassing document," as shown in the tree structure of Figure 5);

- a first document processor for deriving internal structure information by analyzing the internal structure of each of said plurality of related sub-documents in response to said control information (see Figure 6; see Column 9, Lines 40-59 – the electronic publishing system discloses a "first document processor for deriving internal structure information by analyzing the internal structure of each of said plurality of related sub-documents in response to said control information" in that it includes the

element directory shown in Figure 6 that comprises information about
each element of the "encompassing document");

- a second document processor for deriving external structure information
  by analyzing the structural relationship between said plurality of related
  sub-documents in response to said control information (see Figures 16-18;
  see Column 18, Line 4 through Column 20, Line 13 – the electronic
  publishing system discloses a "second document processor for deriving
  external structure information by analyzing the structural relationship
  between said plurality of related sub-documents in response to said
  control information" in that it includes construction of a table of contents by
  identifying the elements, determining the hierarchical relationships
  between the elements and analyzing the element relationships to organize
  the elements into a table of contents); and

- a data generator for generating a table of contents using said internal
  structure information and said external structure information (see Figures
  9-11; see Column 18, Lines 63-64).

Claim 2:

DeRose discloses the system of Claim 1, wherein said data generator
further generates menu icons representing navigation controls supporting User
navigation through said encompassing document structure using table of
contents information (see Figure 10 – the electronic publishing system discloses
a "data generator that further generates menu icons representing navigation

controls supporting User navigation through said encompassing document structure using table of contents information" in that it includes buttons that allow user navigation in the "encompassing document;" also, the limitation "menu icons" read on many other navigation controls displayed in Figure 10).

Claim 3:

DeRose discloses the system of Claim 2, wherein said navigation controls comprise one or more of, (a) controls for navigating between sub-documents and (b) controls for navigating within an individual sub-document (see Figure 10 – the electronic publishing system discloses "controls for navigating between sub-documents" in that it includes buttons that allow user navigation between the sub-documents; the electronic publishing system discloses "controls for navigating within an individual sub-document" in that it includes scroll bars, hyperlinks and cross-references within the sub-documents).

Claim 4:

DeRose discloses the system of Claim 2, wherein said navigation controls comprise one or more of, (a) controls for navigating forward or backward between sub-documents and (b) controls for navigating upward or downward within an individual sub-document (see Figure 10 – the electronic publishing system discloses "controls for navigating forward or backward between sub-documents" in that it includes buttons that allow user navigation between the sub-documents; the electronic publishing system discloses "controls for

navigating upward or downward within an individual sub-document" in that it includes scroll bars, hyperlinks and cross-references within the sub-documents).

Claim 5:

DeRose discloses the system of Claim 1, wherein said sub-documents comprise one or more of, (a) an SGML document, (b) an XML document, (c) an HTML document (d) a document encoded in a language incorporating distinct content attributes and presentation attributes, and (e) a multimedia file (see Column 12, Lines 41-45 – the electronic publishing system discloses this limitation in that it includes "sub-documents" comprising HTML documents).

Claim 6:

DeRose discloses the system of Claim 1, wherein said first document processor derives said internal structure information by identifying at least one of, (a) objects within a document and (b) divisions between objects (see Figures 5 and 6 – the electronic publishing system discloses this limitation in that it includes the "element directory" that identifies both "objects within a document" and "divisions between objects;" the element directory "identifies divisions" in that it separates each element into its own record in the table).

Claim 7:

DeRose discloses the system of Claim 6, wherein said objects within a document comprise heading objects including at least one of: headings, footers,

headers, figure titles and table titles, and non-heading objects including at least

one of: paragraphs, lists tables and graphics. (see Figures 6 and 9-11 – the

electronic publishing system discloses "heading objects including at least one of:

headings, footers, headers, figure titles and table titles" in that it includes section

headings, footnotes and figure titles; the electronic publishing system discloses

"non-heading objects including at least one of: paragraphs, lists tables and

graphics" in that it includes textual paragraphs and graphics).

Claim 8:

DeRose discloses the system of Claim 6, wherein said divisions between

objects are identified based on at least one of: (i) a horizontal line, (ii) a larger

than typical vertical spacing between text lines, (iii) heading marks, (iv) text

properties and (v) special objects (see Column 18, Lines 8-10 – the electronic

publishing system discloses this limitation in that it includes identifying divisions

between objects that are "heading marks;" by including only the elements having

titles in the table of contents, the electronic publishing system "identifies heading

marks").

Claim 9:

DeRose discloses the system of Claim 6, wherein said control information

identifies different objects (see Column 18, Lines 8-10 – the electronic publishing

system discloses "control information that identifies different objects" in that the

SGML document identifies every object in the "encompassing document").

Claim 10:

DeRose discloses the system of Claim 1, wherein said source of control information comprises an SGML document (as indicated in the above rejection for Claim 1, the electronic publishing system discloses this limitation).

Claim 11:

DeRose discloses the system of Claim 1, wherein said second document processor derives said external structure information by using said control information in hierarchically ordering said plurality of related sub-documents to conform to a hierarchical section numbering system (see Figures 16-18; see Column 18, Line 4 through Column 20, Line 13 – the electronic publishing system discloses a "second document processor that derives said external structure information by using said control information in hierarchically ordering said plurality of related sub-documents to conform to a hierarchical section numbering system" in that it includes construction of a table of contents by identifying the elements, determining the hierarchical relationships between the elements and analyzing the element relationships to organize the elements into a table of contents; in other words, the electronic publishing system "uses the control information" to "hierarchically order" the "sub-documents" of the SGML document to "conform to a hierarchical section numbering system" in that it generates a table of contents).

Claim 12:

DeRose discloses a system for processing a plurality of related sub-documents to produce information associated with an encompassing document structure (as indicated in the above rejection for Claim 1, the electronic publishing system discloses this limitation), comprising:

- a source of control information for determining content structure of an encompassing document (as indicated in the above rejection for Claim 1, the electronic publishing system discloses this limitation);

- a first document processor for deriving internal structure information by analyzing the internal structure of each of said plurality of related sub-documents in response to said control information (as indicated in the above rejection for Claim 1, the electronic publishing system discloses this limitation);

- a second document processor for compiling encompassing document structure information by integrating related sub-document structure information into composite structure information (see Figures 16-18; see Column 18, Line 4 through Column 20, Line 13 – the electronic publishing system discloses a "second document processor for compiling encompassing document structure information by integrating related sub-document structure information into composite structure information" in that it includes construction of a table of contents by identifying the elements, determining the hierarchical relationships between the elements

and analyzing the element relationships to organize the elements into a

table of contents); and

- a data generator for generating a table of contents using encompassing

    document structure information (see Figures 9-11; see Column 18, Lines

    63-64).

Claim 13:

DeRose discloses the system of Claim 12, wherein said second document

processor compiles encompassing document structure information into a

hierarchical structure (see Figures 9-11 – the electronic publishing system

discloses a "second document processor that compiles encompassing document

structure information into a hierarchical structure" in that the tables of contents

are displayed in a hierarchical structure).

Claim 14:

DeRose discloses the system of Claim 12, wherein said data generator

further generates menu icons representing navigation controls supporting User

navigation through said encompassing document structure using table of

contents information (as indicated in the above rejection for Claim 2, the

electronic publishing system discloses this limitation).

Claim 15:

DeRose discloses a User interface system supporting processing of a plurality of related sub-documents to produce information associated with an encompassing document structure (see Figures 1-21; see Column 1, Line 1 through Column 30, Line 4; specifically, see Figures 9-11), comprising:

- a menu generator for generating one or more menus permitting User selection of input sub-documents to be processed to create an encompassing document structure (see Figures 9-11 – the electronic publishing system discloses a "menu generator for generating one or more menus permitting User selection of input sub-documents to be processed to create an encompassing document structure" in that it includes "menus" that allow the user to select elements around which the table of contents is built; the limitation "menus" reads on many controls displayed in Figure 10);

- an icon permitting User initiation of processing of related sub-document structure information to create an encompassing document structure derived by integrating related sub-document structure information into composite structure information (see Figures 16-18; see Column 18, Line 4 through Column 20, Line 13 – the electronic publishing system discloses an "icon permitting User initiation of processing of related sub-document structure information to create an encompassing document structure derived by integrating related sub-document structure information into

composite structure information" in that a user initiates the system

processing by selecting one document object using an "icon"); and

- menu icons representing navigation controls supporting User navigation

  through said encompassing document structure using said composite

  structure information (as indicated in the above rejection for Claim 2, the

  electronic publishing system discloses this limitation).

Claim 16:

DeRose discloses the User interface system of Claim 15, wherein said

User interface menu functions are incorporated into a web browser (see Column

7, Lines 48-50).

Claim 17:

DeRose discloses a system for processing a plurality of related sub-

documents to produce information associated with an encompassing document

structure (as indicated in the above rejection for Claim 1, the electronic

publishing system discloses this limitation), comprising:

- a source of control information for determining content structure of an

  encompassing document (as indicated in the above rejection for Claim 1,

  the electronic publishing system discloses this limitation);

- a first document processor for deriving internal structure information by

  parsing the internal structure of each of said plurality of related sub-

  documents to identify structural object elements in response to said

control information (see Figure 6; see Column 9, Lines 40-59 – the

electronic publishing system discloses a "first document processor for

deriving internal structure information by parsing the internal structure of

each of said plurality of related sub-documents to identify structural object

elements in response to said control information" in that it includes the

element directory shown in Figure 6 that comprises information about

each element of the "encompassing document");

- a second document processor for compiling encompassing document

  structure information by integrating related sub-document structure

  information, derived using said identified object elements, into composite

  structure information (see Figures 16-18; see Column 18, Line 4 through

  Column 20, Line 13 – the electronic publishing system discloses a

  "second document processor for compiling encompassing document

  structure information by integrating related sub-document structure

  information, derived using said identified object elements, into composite

  structure information" in that it includes construction of a table of contents

  by identifying the elements, determining the hierarchical relationships

  between the elements and analyzing the element relationships to organize

  the elements into a table of contents); and

- a processor for generating a navigation menu based on said composite

  structure information (see Figures 9-11; see Column 18, Lines 63-64).

Claim 18:

DeRose discloses the system of Claim 17, wherein said navigation menu comprises a table of contents linked to associated content via a database (see Column 7, Line 31 through Column 8, Line 26 – the electronic publishing system discloses a "table of contents linked to associated content via a database" in that it includes a client/server computer system).

Claim 19:

DeRose discloses a program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps for determining a structure for an electronic document, the method steps comprising:

- identifying a plurality of divisions between a plurality of document objects (as indicated in the above rejection for Claim 6, the electronic publishing system discloses this limitation);

- identifying a plurality of heading objects (as indicated in the above rejection for Claim 7, the electronic publishing system discloses this limitation);

- determining a plurality of relationships between the objects, wherein the relationships define an internal structure (as indicated in the above rejection for Claim 1, the electronic publishing system discloses this limitation);

- updating the internal structure upon determining a new relationship (see Figures 16-18; see Column 8, Lines 12-26 and Column 18, Line 4 through Column 20, Line 13 – the electronic publishing system discloses "updating the internal structure upon determining a new relationship" in that it analyzes the relationships between the document objects each time it generates a table of contents; thus, the "internal structure" of the document is updated whenever the document is edited; also, the electronic publishing system discloses that the document might be an operation manual for a computer system, and such manuals are often edited);

- identifying a plurality of sections within a document (see Figures 9-11 – the electronic publishing system discloses "identifying a plurality of sections within each document" in that it generates a table of contents for the document);

- formatting the document objects in a linear sequence (see Figures 9-11 – the electronic publishing system discloses "formatting the document objects in a linear sequence" in that it generates a table of contents for the document);

- providing a plurality of section headings in a linear sequence (see Figures 9-11 – the electronic publishing system discloses "providing a plurality of section headings in a linear sequence" in that it generates a table of contents for the document); and

- providing a plurality of standardized controls (as indicated in the above
  rejection for Claim 3, the electronic publishing system discloses this
  limitation).

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure: DeRose et al., U.S. Patent No. 6,546,406; DeRose et al.,

U.S. Patent No. 6,167,409; DeRose et al., U.S. Patent No. 5,893,109; Nielsen,

U.S. Patent No. 6,003,046; Jang et al., U.S. Patent No. 6,728,403; and Hennum,

U.S. Patent No. US 2002/0054138 A1.

Any inquiry concerning this communication or earlier communications from
the examiner should be directed to Doug Hutton whose telephone number is
(703) 305-1701. The examiner can normally be reached on Monday-Friday from
8:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the
examiner's supervisor, Heather Herndon, can be reached at (703) 308-5186.
The fax phone number for the organization where this application or proceeding
is assigned is (703) 746-7239.

Any inquiry of a general nature or relating to the status of this application
or proceeding should be directed to the receptionist whose telephone number is
(703) 305-3900.

WDH
July 13, 2004

DOUG HUTTON
PATENT EXAMINER
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